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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,996	07/08/2003	Donna M. Hale	706315US1	8173
24938	7590	07/18/2005	EXAMINER	
DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION			WILSON, KATINA M	
CIMS 483-02-19			ART UNIT	
800 CHRYSLER DR EAST			PAPER NUMBER	
AUBURN HILLS, MI 48326-2757			2856	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/614,996	HALE ETAL	
	Examiner	Art Unit	
	Katina M Wilson	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1,3-8,11,12,and 16-20 is/are rejected.
- 7) ☒ Claim(s) 2, 9-10,13, 15, 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5, 7, 17, 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. ***.

As to claims 5 and 17, specification is not clear how the output comprises a resistance?

As to claim 7 and 19, specification is not clear how the output comprises a network message?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 8, 11, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossman 5184510.

Rossman teaches a liquid level sensor comprising an ultrasonic ranging sensor 50 that operates by projecting a focused beam of acoustical pluses down a longitudinal axis of a cavity 34 defined within the tube 30. Reflections of the acoustical wave from the surface of a sphere/floating ball 10 are received by the ultrasonic sensor 50, with the time differential between the transmission of the acoustic wave and the reception of the reflected wave being directly proportional to the distance of the ball 10 from the ultrasonic sensor 50. The ball is formed of a thin plastic (a type of epoxy) substance and includes a hollow, air filled central core and in some circumstances the ball is coated to enhance the durability or reflective characteristics of the ball. Rossman does not state the liquid is fuel in the storage tank, but discloses in the prior use of liquid level sensors for a fuel reservoir (col. 1, line 64). Accordingly, it would have been obvious to one of ordinary skill in the art to use the liquid level sensor of Rossman to measure the level of fuel in a tank.

4. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossman in view of Chung et al 4702316.

As to claims 4 and 12, Chung et al teaches ball sealer 22 are covered with a thin coating of elastomer of low densities to float in a injected carrier fluid. It would have been obvious to one skilled in the art at the time the invention was made to cover

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Rossman's float ball 10 with a thin coating of elastomer to float within tube 30 and to with stand adverse temperatures.

5. Claims 5-7 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossman.

As to claims 5-7 and 16-19, Rossman does not teach an output is a resistance, a current, voltage, or a network message. Nevertheless, it would have been obvious to one skilled in the art at the time of the invention was made to modify the output 108 of the microprocessor 100 to ascertain an output of current level, a current reading, voltage level, and/or voltage reading, relative to liquid level.

Allowable Subject Matter

6. Claims 2, 9, 10, 13, 15, and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 14 is allowed.

The following is an examiner's statement of reasons for allowance: Claim 14 includes subject matter "centering rod" in combination with the remaining claim limitation is not taught in manner one skill in the would be able to combine Cogliano's reference with Rossman and Chung et al references.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Cogliano 5351414 teaches a sleeve is used to reduce friction with respect to the rod.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katina M Wilson whose telephone number is 571-272-2209. The examiner can normally be reached on Mon-Thurs 6:15am-2:00pm, off on Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

KW


DANIEL S. LARKIN
PRIMARY EXAMINER